

Notice of Allowability

Application No.

10/540,134

Examiner

Darren W. Gorman

Applicant(s)

CARTA, LAMBERTO

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed August 1, 2006.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413B) Paper No./Mail Date 20060824.
7. ☒ Examiner's Amendment/~~Comment~~
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Art Unit: 3752

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Roland Long on August 28, 2006. For a detailed explanation, see attached interview summary form PTO-413B.

The application has been amended as follows:

(PLEASE SEE FOLLOWING 7 PAGES)

1. (currently amended) A nebulising dispenser head (1 ; 100) for a bottle that is elastically deformable by squeezing, comprising:

a ~~channel for the liquid~~ channel (4) with first and second ends,

the ~~channel for liquid~~ channel connected at the first end to a suction tube (6) which draws a liquid contained within a ~~the~~ bottle (2) from under a volume of air, and the liquid channel terminating, at the second end, with a ~~nozzle of the liquid~~ nozzle (7) disposed in a mixing chamber (70), the mixing chamber defined by a terminal element (3)-facing said nozzle[[,]];

an orifice (31) for discharging the liquid outwards from the mixing chamber[[,]]; and

a ~~channel for an air~~ channel (5) communicating with said volume of air of the bottle (2), the ~~channel for air~~ channel (5) surrounding the liquid channel ~~for the liquid~~ (4) and merging into said mixing chamber (70) wherein,

said ~~channel for the liquid~~ channel (4) and said air channel ~~for air~~ (5) are formed in a block (10) of said dispenser head (1 ; 100) as a ribbed tubular segment (40) externally ribbed with ribs (42) ~~and~~,

said air channel ~~for air~~ (5) comprises a wall (50) surrounding said liquid channel ~~of the liquid~~ (4),

said wall (50) ~~comprises~~ defines a ~~ribbed~~ tubular compartment (51) substantially coaxial to said ribbed tubular segment (40), thereby forming a ribbed tubular compartment,

said wall (50) ~~having~~ includes an opening (52) for communication with said ~~inner~~ volume of air of the bottle (2),

said terminal element includes an ejection tip (3) with a tubular element (30) having a cavity shaped to axially narrow outwards in said discharge orifice (31) and terminate with a diverging segment (32),

said ejection tip (3) is inserted with a proximal portion thereof into said ribbed tubular compartment (51) ~~and thereby defining said mixing chamber (70)[[:]]~~,

said ejection tip includes a sleeve (33) externally coaxial to said tubular element (30) and integrally provided with an abutment (34) defining a depth of insertion of the ejection tip into said ribbed tubular compartment (51) of the block (10), and

said ejection tip further includes a sealing door (8) is integrally hinged in at a distal part (35) of said sleeve (33), the sealing door (8) being rotatable by 180° from an open position to a closed position of said discharge orifice (31).

2. (currently amended) A dispenser head (1 ; 100) as claimed in claim 1, further comprising:

a slit in the block formed externally to said ribbed tubular compartment (10), wherein,

the ejection tip (3) has a centering element,

the centering element being a plate (36) projecting from said sleeve (33) and being insertable into said slit (11) externally to said ribbed tubular compartment (51).

3. (currently amended) A dispenser head (1 ; 100) as claimed in claim 1, wherein,

said ejection tip (3) has a cylindrical distal end (37) in correspondence with the diverging segment (32) of the discharge orifice (31), the distal end (37) comprising an abutment step (38), and

said sealing door (8) has a face (80) ~~engaging with the ejection tip (3)~~, a sealing ring (81) and, coaxially internal with the sealing ring, a projecting pivot (82),

wherein when the sealing door (8) is rotated to the closed position, the face (80) engages with the ejection tip, the sealing ring (81) abuts against the abutment step (38) being secured on the ejection tip (3) for the seal, and the projecting pivot (82) entering enters said final diverging segment (32) of the discharge orifice (31) to lock the sealing door (8) in the closed position.

4. (currently amended) A dispenser head (1 ; 100) as claimed in claim 1, wherein, said wall (50) surrounding the liquid channel for the liquid (5) (4) has, on[[,]] a surface oriented towards the tubular segment (40) of the liquid channel for the liquid (4), undercut portions (53), and

said tubular element (30) of the ejection tip (3) has an outer surface with corresponding projections (39), in use, engaging said undercut portions (53).

5. (previously presented) A dispenser head (1) as claimed in claim 1, further comprising:

a snap-on tubular portion for snap-on connection (12),

the snap-on tubular portion internally shaped with circumferentially equidistant protrusions (13) able to engage a peripheral projection (20) of a neck of the bottle (2).

6. (previously presented) A dispenser head (100) as claimed in claim 1, further comprising:

a gasket (130); and

a separate collar (120) internally threaded to be screwed, with interposition of the gasket (130), onto a bottle neck with a matching thread.

7. (currently amended) A nebulising dispenser head for use with a bottle containing a liquid and a volume of air, comprising:

a liquid channel (4) with first and second ends;

a suction tube (6) connected to the first end, in use the suction tube (6) to draw a the liquid contained within a the bottle (2) from under a the volume of air and terminating;

a liquid nozzle with a mixing chamber (70) connected to the second end;

a terminal element facing said nozzle;

an orifice (31), in use discharging the liquid outwards from the mixing chamber;

an air channel (5) communicating with said volume of air of the bottle (2), the air channel (5) surrounding the liquid channel (4),

said liquid channel (4) being formed as a an externally ribbed tubular segment (40),

said air channel comprising a wall (50) surrounding said liquid channel (4),

said wall (50) ~~comprising~~ defining a ~~ribbed~~ tubular compartment (51) substantially coaxial to said ribbed tubular segment (40), thereby forming a ribbed tubular compartment,

said wall (50) having an opening (52), in use, for communication with said ~~inner~~ volume of air of the bottle (2),

said terminal element including an ejection tip (3) with a tubular element (30) having a cavity axially narrowing outwards in said discharge orifice (31) and terminating with a diverging segment (32),

said ejection tip (3) inserted with a proximal portion into said ribbed tubular compartment (51) ~~[[;]]~~,

said ejection tip including a sleeve (33) externally coaxial to said tubular element (30) and integrally provided with an abutment (34) defining depth of insertion of the ejection tip into said ribbed tubular compartment (51) ~~of the block (10);~~ and

said ejection tip further including a sealing door (8) integrally hinged ~~in~~ at a distal part (35) of said sleeve (33), the sealing door (8) being rotatable from an open position to a closed position of said discharge orifice (31).

8. (previously presented) A dispenser head as claimed in claim 7, wherein,
the ejection tip (3) comprises a centering element,
the centering element is a plate (36) projecting from said sleeve (33).

9. (currently amended) A dispenser head as claimed in claim 7, wherein,

said ejection tip (3) has a cylindrical distal end (37) in correspondence with the diverging segment (32) of the discharge orifice (31),

the distal end (37) comprises an abutment step (38),

said sealing door (8) has a face (80) engaging with the ejection tip (3), a sealing ring (81) and, coaxially internal with the sealing ring, a projecting pivot (82),

the projecting pivot (82) enters said ~~final~~ diverging segment (32) of the discharge orifice (31) to lock the sealing door (8) in the closed position.

10. (currently amended) A dispenser head as claimed in claim 7, wherein,

said wall (50) surrounding the liquid channel ~~(5)~~ (4) has undercut portions (53) on a surface oriented towards the tubular segment (40) of the liquid channel (4), and

said tubular element (30) of the ejection tip (3) has an outer surface with corresponding projections (39), in use, said corresponding projections (39) engaging said undercut portions (53).

11. (currently amended) A dispenser head as claimed in claim 7, further comprising:

a snap-on tubular portion for snap-on connection (12),

the snap-on tubular portion internally shaped with circumferentially equidistant protrusions (13), in use, to engage a peripheral projection (20) of a neck of the bottle (2).

12. (previously presented) A dispenser head as claimed in claim 7, further comprising:

a gasket (130); and

a collar (120) internally threaded to be screwed, with interposition of the gasket (130), onto a bottle neck with a matching thread.

Allowable Subject Matter


2. Claims 1-12 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Gorman whose telephone number is 571-272-4901. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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DWG
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Art Unit 3752

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